WHAT IS CLAIMED IS:

1. A method of streaming video data, comprising:

providing a plurality of frames to be transmitted from a video transmitter system to a video receiver system;

categorizing the plurality of frames into a reference frame and a prediction frame;

encoding the reference frame to be transmitted to the video receiver system using a zero run coding method;

transmitting the encoded reference frame to the video receiver system;

dividing the prediction frame into a plurality of blocks;

determining whether any of the plurality of blocks needs to be transmitted to reproduce the prediction frame of acceptable quality at the video receiver system; and

transmitting to the video receiver system only the blocks that have been determined necessary to reproduce the prediction frame of acceptable quality at the video receiver system.

2. The method of claim 1, further comprising:

marking the blocks of frame that have been determined as necessary to reproduce the prediction frame of acceptable quality at the video receiver system.

3. The method of claim 1, wherein there are at least one reference frame and first and second prediction frames, where the reference frame and the first prediction frame have been encoded for transmission to the video receiver system, wherein the determining step includes:

comparing a block of the second prediction frame with a corresponding block of a comparison frame that has been previously encoded for transmission to the video receiver system.

4. The method of claim 3, wherein the comparison frame is the reference frame.

5. The method of claim 3, wherein the comparison frame is the first prediction frame.

6. The method of claim 3, wherein the comparison frame is a frame that has been encoded for transmission immediately prior to the second prediction frame.

7. The method of claim 3, wherein the comparing step includes:

obtaining a difference value D between a first value representing the block of the second prediction frame and a second value representing the corresponding block of the comparison frame.

8. The method of claim 7, further comprising:

dividing the block of the second prediction frame into a first set of sub-blocks;

obtaining a first set of representative values of the first set of sub-blocks;

dividing the corresponding block of the comparison frame into a second set of sub-blocks; and

obtaining a second set of representative values for the second set of sub-blocks, wherein the difference value D is obtained by subtracting one of the set of the representative values from the other set of the representative values.

9. The method of claim 7, further comprising:

comparing the difference value D to a first threshold value T1; and

determining whether to transmit the block of the second prediction frame to the video receiver system according to a result of the comparing of the difference value D to the first threshold value T1.

10. The method of claim 9, wherein the block of the second prediction frame is marked for transmission to the video receiver system if the difference value D is greater than the first threshold value T1.

11. The method of claim 9, further comprising:

comparing the difference value D to a second threshold value T2; and

determining whether to transmit a first set of blocks in close proximity to the block of the second prediction frame according to a result of the comparing the difference value D to the second threshold value.

12. The method of claim 11, further comprising:

comparing the difference value D to a third threshold value T3; and

determining whether to transmit a second set of blocks in close proximity to the block of the second prediction frame according to a result of the comparing the difference value D to the third threshold value.

13. The method of claim 12, wherein the first set of blocks are adjacent blocks to the block of the second prediction frame.

14. The method of claim 12, wherein the second set of blocks are diagonal blocks to the block of the second prediction frame.

15. The method of claim 12, wherein the first, second and third threshold values T1, T2, and T3 have the following relationship: T1<T2<T3.

16. The method of claim 3, wherein the plurality of frame to be transmitted are categorized into only two types of frames.

17. A method of streaming video data, comprising:

providing a plurality of frames to be transmitted from a video transmitter system to a video receiver system;

categorizing the plurality of frames into a plurality of reference frames and a plurality of prediction frames;

dividing a first reference frame into a plurality of blocks;

encoding the plurality of blocks of the first reference frame;

transmitting substantially all of the plurality of blocks of the first reference frame to the video receiver system;

dividing a first prediction frame into a plurality of blocks;

determining, using a diff function, whether any of the plurality of blocks of the first prediction frame needs to be transmitted to reproduce the first prediction frame of acceptable quality at the video receiver system; and

transmitting to the video receiver system only the blocks of the first prediction frame that have been determined as necessary to reproduce the first prediction frame of acceptable quality at the video receiver system.

18. A method of streaming video data, comprising:

providing a plurality of frames to be transmitted from a video transmitter system to a video receiver system;

categorizing the plurality of frames into a plurality of reference frames and a plurality of prediction frames;

encoding the plurality of the reference frames using a first encoding method; and

encoding the plurality of the prediction frames using a second encoding method different from the first encoding method, the second encoding method including:

dividing a first prediction frame into a plurality of blocks;

determining, using a diff function method, whether any of the plurality of blocks of the first prediction frame needs to be transmitted to reproduce the first prediction frame of acceptable quality at the video receiver system; and

transmitting to the video receiver system only the blocks of the first prediction frame that have been determined necessary to reproduce the first prediction frame of acceptable quality at the video receiver system.

19. The method of claim 18, wherein the diff function method includes:

comparing a block of the first prediction frame with a corresponding block of a comparison frame to obtain a difference value D;

comparing the difference value D with a first threshold value T1; and

indicating the block of the first prediction frame as needing to be transmitted to the video receiver system if the difference value D is greater than the first threshold value T1.

20. The method of claim 19, further comprising:

comparing the difference value D to a second threshold value T2; and

indicating a first set of blocks in close proximity to the block of the first prediction frame as needing to be transmitted to the video receiver system if the difference value D is greater than the second threshold value T2.

21. The method of claim 20, further comprising:

comparing the difference value D to a third threshold value T3; and

indicating a second set of blocks in close proximity to the block of the first prediction frame as needing to be transmitted to the video receiver system if the difference value D is greater than the third threshold value T2.

22. The method of claim 19, wherein the comparison frame is a frame that immediately precedes the first prediction frame in the order of transmission to the video receiver system.

23. The method of claim 22, wherein the comparison frame is a second prediction frame.

24. The method of claim 19, wherein the comparison frame is a reference frame.